

CONFIDENTIAL, INTERNAL USE ONLY, PREDECISIONAL

UPDATES ON THE *CANYON* AND *ARIZONA 1* URANIUM MINES

The mines are subject to the Radionuclide NESHAP Subpart B and approval conditions under Subpart A.

Canyon Mine

Energy Fuels Resources (USA) Inc. (Energy Fuels), formerly Denison Mines, is proposing to reopen the Canyon Mine, located 6.5 miles southeast of Tusayan, Arizona, south of the Grand Canyon (attachment). The mine was originally developed in 1986 and initial mine development work was conducted in the late 1980's. The mine was placed on standby in the early 1990's due to low uranium prices. Energy Fuels now proposes to reactivate the mine and will be seeking an approval to construct/modify under 40 CFR Part 61, Subparts A and B of the NESHAP.

Subpart B sets a standard for emissions of radon from the ventilation of underground uranium mines. Emissions shall not cause any member of the public to receive a dose of 10millirem/year. The projected dose is modeled to the nearest receptor. The further away the receptor, the smaller the dose. The mine is approximately 4.5 miles from the nearest receptor, Grand Canyon National Park Airport, so there should be no problem with the mine demonstrating compliance with the emissions standard. The mine is expected to produce about 70,000 tons of ore, less than the 100,000 tons threshold level for triggering the NESHAP. Energy Fuels feels it's prudent to apply in the event that the mine was to eventually produce more than 100,000 tons. The life span of these mines is short; it only takes 2-3 years to extract all the commercially valuable uranium.

Arizona 1 Mine

We had been evaluating the Arizona 1 mine for approval in 2010. During our evaluation we discovered that the mine was planning to remove only 70,000 tons of ore during its lifetime which meant that the mine was too small to trigger the NESHAP and we stopped our evaluation. Recently, Energy Fuels determined that they had found more commercially valuable ore than expected and would continue mining beyond the 70,000 tons. They would ultimately mine over 100,000 tons and this quantity would trigger the NESHAP. In consultation with ORC it was decided that Energy Fuels should submit a new application for approval.

Since the Arizona 1 mine is over 18 miles from the nearest receptor it will easily demonstrate compliance with the dose standard. The production life for the Arizona 1 Mine is expected to be approximately 2-3 years. In the case of the Arizona 1 mine, the mining may be almost concluded by the time the approval is completed.

Key Points

- The NESHAP does not require public comment or notification. We did not ask for comments for the Pinenut Mine which we approved in April 2011. We informed local tribes that we would be taking the action.

- ORIA and OGC have concurred that neither the Endangered Species Act (ESA) nor the National Historic Preservation Act (NHPA) is triggered by the issuance of approvals to construct under NESHAP Subparts A and B.
- The original EIS and mining plans were approved by BLM and the Forest Service and those agencies determined that there have been no substantial changes that would warrant a new EIS. No further NEPA review is necessary and actions under the Clean Air Act are exempt from NEPA.
- The mines do not require water pumping – no water permit is required.
- There will be no mining wastes at this site because all the ore is trucked to a mill in Utah which has its own permit.
- Region 8 considered only air issues in the permitting of the Whirlwind Uranium Mine in Colorado.
- Arizona has issued state permits for the mines. Subpart B has not been delegated to ADEQ.